

IN THE CLAIMS

1 (Previously Presented). A system, comprising:

a decoder to decode encoded video information having a first format into intermediate video information and to extract motion vectors from the encoded video information;

a digital to analog converter to convert said intermediate format to analog data;

an analog to digital converter to convert said analog data to digital data;

a compression block to encode the digital data into output video information

having a second format using the motion vectors extracted from the encoded video information;
and

a device to store the output video information from the compression block.

2 (Original). The system of claim 1, wherein the first format and the second format have a common format.

3 (Original). The system of claim 2, wherein the common format includes MPEG-1, MPEG-2, MPEG-4, H.264, Windows Media Video version 9 (WMV9) or Advanced Video System (AVS).

4 (Original). The system of claim 1, wherein the first format includes MPEG-2, and wherein the second format includes H.264.

5 (Original). The system of claim 1, wherein the decoder is arranged to extract quantization data, picture data, or error data from the encoded video information.

Claim 6 (Canceled).

7 (Original). The system of claim 1, wherein the intermediate video information includes digital pixel information.

8 (Original). The system of claim 1, further including:

an output port to output the intermediate video information.

9 (Previously Presented). A method, comprising:

extracting motion information from an encoded video stream;

converting the encoded video stream to an intermediate video stream;

converting the stream to analog and then to a digital stream; and

compressing the digital stream into an output video stream using the motion information extracted from the encoded video stream.

10 (Original). The method of claim 9, wherein the extracting includes:

obtaining quantization data or picture data from the encoded video stream, and

wherein the encoding includes encoding the intermediate video stream using the motion information and the quantization data or the picture data obtained from the encoded video stream.

11 (Original). The method of claim 9, wherein the converting includes:

decoding the encoded video stream to generate a stream of uncompressed pixel data.

12 (Original). The method of claim 11, wherein the converting further includes:

converting the stream of uncompressed pixel data to analog form to generate the intermediate video stream.

13 (Original). The method of claim 9, wherein the encoded video stream and the output video stream share a common encoding format.

14 (Original). The method of claim 9, wherein the encoded video stream and the output video stream have different encoding formats.

15 (Original). The method of claim 9, further comprising:
storing the output video stream.

16 (Original). The method of claim 9, further comprising:
storing the intermediate video stream.

17 (Previously Presented). An apparatus, comprising:
a device to extract motion vectors from the input media information; and
a digital to analog converter coupled to an output of said device;
an analog to digital converter coupled to an output of said digital to analog
converter; and
an encoder to encode the output of said analog to digital converter into output
media information having an output format using the other information extracted from the input
media information.

18 (Original). The apparatus of claim 17, wherein the input media information is
encoded in the output format.

19 (Original). The apparatus of claim 17, wherein the input media information is
encoded an input format that is different from the output format.

Claim 20 (Canceled).

21 (Previously Presented). The apparatus of claim 17, wherein the input media
information is encoded, and
wherein the device includes a decoder to decode the encoded input media
information to generate intermediate media information.

Claim 22 (Canceled).

23 (Original). The apparatus of claim 17, further comprising:

a storage device to store the output media information from the encoder.

24 (Original). A method, comprising:

obtaining at least motion vectors from an encoded video stream;

decoding the encoded video stream to generate an analog video stream; and

encoding the analog video stream to generate an output video stream using the motion vectors obtained from the encoded video stream.

25 (Original). The method of claim 24, wherein the obtaining further includes obtaining quantization data and picture data from the encoded video stream.

26 (Original). The method of claim 25, further comprising:

controlling a rate of the encoding using the quantization data and the picture data.

27 (Original). The method of claim 24, further comprising:

storing the output video stream.